

H. E. SMITH.
Clothes-Wringer.

No. 204,850.

Patented June 11, 1878.

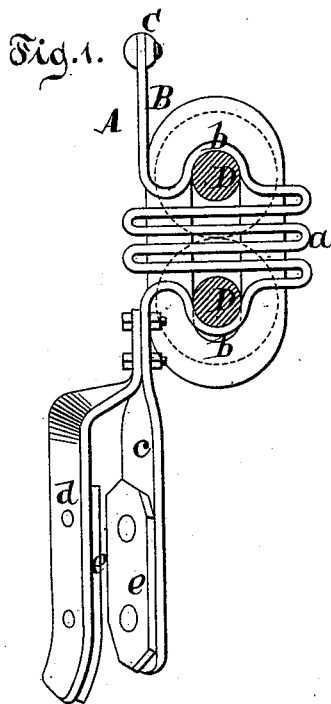
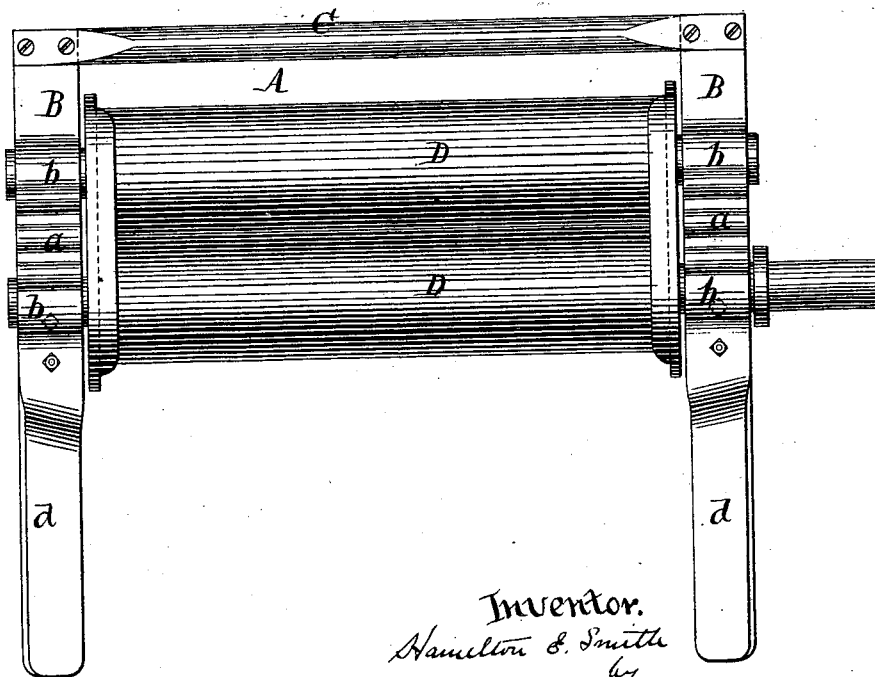


Fig. 2.



Witnesses.
Chas. Wahlers.
Otto Aufeland.

Inventor.
Hamilton & Smith
by
Van Santvoord & Hauff
his attorneys.

UNITED STATES PATENT OFFICE.

HAMILTON E. SMITH, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. **204,850**, dated June 11, 1878; application filed November 6, 1877.

To all whom it may concern:

Be it known that I, HAMILTON E. SMITH, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Clothes - Wringers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a sectional end view. Fig. 2 is a front view.

Similar letters indicate corresponding parts.

This invention consists in the combination, in a clothes-wringer, of two elastic rollers with two standards connected by a traverse, and made of spring-steel, each being bent to follow a serpentine course and to form a series of bends, and two bearings for the shafts of the elastic rollers, one above and one below said serpentine course, so that by the elasticity of the serpentine courses of the standards the two elastic rollers are held in close contact, and also permitted to yield and to adjust themselves to the varying thickness of the materials passing through between them.

In the drawings, the letter A designates the frame of my clothes-wringer, which is composed of two standards, B B, and a traverse, C. The standards B are made of spring-steel, and each of them is bent to follow a serpentine course, *a*, and to form a series of bends, and two bearings, *b b*, for the shafts of the elastic rollers D D, one of said bearings being situated above and the other below the serpentine course *a*, as shown in Fig. 1 of the drawing. The bearings *b b* are at such a distance apart that in order to introduce the elastic rollers the serpentine courses *a* have to be forced apart, so that said rollers, after having been inserted, are held in close contact with each other, and as the serpentine courses *a* are elastic the rollers are capable of adjusting themselves to the thickness of the material passing through between them.

By this arrangement no boxes or extra parts have to be provided to form the bearings for

the elastic rollers D, and at the same time the standards B B themselves form the springs which retain said rollers in the proper relation to each other.

The standards B extend beyond the bearings for the lower roller, and they form elastic jaws *c*, to each of which is secured a secondary elastic jaw, *d*. The inner surfaces of these jaws are lined with pads *e*, of india-rubber, leather, or other suitable material, so that by forcing the jaws *c d* over the edge of a wash-tub the wringer is retained firmly in position.

Springs have heretofore been employed in clothes-wringers, and have been bent to form seats for receiving and supporting the journals of the rollers, above and below a serpentine course or spring-leaf; but in all such instances, so far as I am aware, such springs have been made as a separate article, and afterward connected by bolts with the frame, by which they and their supporting-rollers are attached to a tub, which construction and arrangement is not claimed by me.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, in a clothes-wringer, of two elastic rollers and two standards connected by a traverse, each of said standards made of spring-steel, and each having two jaws for connection with a tub or other vessel, one jaw of each of the said standards being extended and bent to form seats for the journals of the upper and lower wringer-rollers, and a series of serpentine curves that will be between said upper and lower journal-seats, substantially as herein shown and described.

In testimony that I claim the foregoing I have hereto set my hand and seal this 5th day of November, 1877.

HAMILTON E. SMITH. [L. S.]

Witnesses:

W. HAUFF,
E. F. KASTENHUBER.